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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ZIA, SYED

ART UNIT

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2431

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,408	Applicant(s) ZHANG ET AL.	
	Examiner SYED ZIA	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the Appeal Brief filed on December 2, 2008, PROSECUTION IS
HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following
two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37
CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an
appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee
can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have
been increased since they were previously paid, then appellant must pay the difference between
the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing
below:

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2436

This office action is in response to remarks filed December 2, 2008. Claims 1-24 are pending for further consideration.

Response to Arguments

Applicant's arguments with respect to claim 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Gregorio Rodriguez et al. (U.S. Publication No.: 2006/0022085) (hereafter Rodriguez).

1. Regarding Claim 1 Rodriguez teach and describe a method for providing a secure communications session with a user terminal in a communications network (Fig.3-5), the method

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comprising the steps of: transmitting first and second secure keys to the user terminal using a secure communications method, the first and second secure keys being suitable for storage in the user terminal for use during the secure communications session; encrypting and transmitting data to the user terminal using a current session key, and receiving and decrypting data received from the user terminal using the current session key, the first secure key initially being used as the current session key; and periodically generating by an access point a subsequent session key using the second secure key and using the subsequent session key as the current session key during subsequent communications between the communications network and the user terminal ([Fig1-4, and 0049-0051, and 0061-0066]).

2. Regarding Claim 4 Rodriguez teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: transmitting first and second secure keys to the mobile terminal using a secure communications method, the first and second secure keys being suitable for storage in tile mobile terminal for use during the secure communications session; encrypting and transmitting data to the mobile terminal using a current session key, and receiving and decrypting data received from the mobile terminal using the current session key, the first secure key initially being used as the current session key; and periodically generating a subsequent session key using the second secure key and using the subsequent session key as the current session key during subsequent communications with the mobile terminal ([Fig1-4, and 0049-0051, and 0061-0066]).

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3. Regarding Claim 7 Rodriguez teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: generating a secure key; transmitting the secure key to the mobile terminal using a secure communications method, the secure key being stored in the mobile terminal for use during the secure communications session; encrypting and transmitting data to the mobile terminal using a current session key, and receiving and decrypting data received from the mobile terminal using the current session key; and ending the secure communications session by an access point in response to receiving a logoff message from the mobile terminal, the logoff message being in encrypted form and including the secure key ([Fig1-4, and 0049-0051, and 0061-0066]).

4. Regarding Claim 8 Rodriguez teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network the method comprising the steps of: generating first and second secure keys; transmitting the first and second secure keys to the wireless local area network using a secure communications method, the first and second secure keys being stored in the wireless local area network or use during the secure communications session; encrypting and transmitting data to the wireless local area network using a current session key, and receiving and decrypting data received from the wireless local area network using the current session key, the first secure key initially being used as the current session key; and periodically generating by the mobile terminal a subsequent session key using the second secure key and using the subsequent session key as the current session key during

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subsequent communications with the wireless local area network (([Fig1-4, and 0049-0051, and 0061-0066])).

5. Regarding Claim 11 Rodriguez teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: generating a secure key; transmitting the secure key to the wireless local area network using a secure communications method, the secure key being stored in the wireless local area network for use during the secure communications session; encrypting and transmitting data to the wireless local area network using a current session key, and receiving and decrypting data received from the wireless local area network using the current session key; and ending the secure communications session in response to receiving a logoff message from the wireless local area network, the logoff message being in encrypted form and including the secure key ([Fig1-4, and 0049-0051, and 0061-0066])).

6. Regarding Claim 12 Rodriguez teach and describe a method for providing a secure communications session with a mobile terminal in a wireless local access network, the method comprising the steps of: installing at least two shared secrets on both the mobile terminal and the wireless local area network access point during the user- authentication phase whereby a first secret is the initial session key and a second secret is utilized as secure seed to generate subsequent session keys ([Fig1-4, and 0049-0051, and 0061-0066])).

7. Regarding Claim 18 Rodriguez teach and describe a method for providing a secure communications session between a mobile terminal and a wireless local access network, the

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method comprising the steps of: a mobile terminal sending during session logoff an encrypted logoff request accompanied by the secure seed such that the secure seed appears in the logoff request ([Fig1-4, and 0049-0051, and 0061-0066]).

8. Regarding Claim 19 Rodriguez teach and describe an access point for providing a secure communications session between a mobile terminal and a wireless local access network, comprising: a means for transmitting first and second secure keys to the mobile terminal using a secure communications method and a means to encrypt data using the first secure .key and a means to periodically generate a subsequent session key using the second secure key ([Fig1-4, and 0049-0051, and 0061-0066]).

9. Regarding Claim 20 Rodriguez teach and describe a terminal device for providing a secure communications session with a communications network, comprising:
a means to receive a secure key and a secure seed and a means to store the secure key and the secure seed for use during the secure communications session; a means to receive data and a means to decrypt the data using a current session key during the secure communications session, the secure key being using initially as the current session key; and a means to generate a subsequent session key using the current session key and the secure seed, the subsequent session key thereafter being used as the current session key for subsequent communications ([Fig1-4, and 0049-0051, and 0061-0066]).

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10. Regarding Claim 24, Rodriguez teach and describe an access point for providing a secure communications session between a mobile terminal and a wireless local area network, comprising: a means to transmit a secure key and a secure seed and a means to store the secure key and the secure seed for use during the secure communications session; a means to encrypt data and a means to transmit data to the mobile terminal and a means to receive data and a means to decrypt the data from the mobile terminal using a current session key during the secure communications session, the secure key being using initially as the current session key; and a means to generate a subsequent session key using the current session key and the secure seed, the subsequent session key thereafter being used as the current session key for subsequent communications ([Fig1-4, and 0049-0051, and 0061-0066]).

10. Claims 2-3, 5-6, 9-10, 13-7, and 21-23 are rejected applied as above rejecting Claims 1, 4, 8, 12, and 20. Furthermore, Rodriguez teach and describe a method for providing a secure communications session between a mobile terminal and a wireless local access network, wherein:

- logging off the user terminal in response to an encrypted logoff request from the user terminal accompanied by the second secure key, and periodically generating step comprises generating the access point a subsequent session key by concatenating the current session key with the second secure key and applying a hash algorithm ([0061-0066]).

the periodically generating step comprises generating the access point a subsequent session key: by concatenating the new key and the second secure key and running a hash algorithm to generate the subsequent session key, and by using a combination of a new key and

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the second secure key, the new key being generated using the first secure key ([0061-0066]).

the periodically generating step comprises generating a subsequent session key by concatenating the new key and the second secure key and running a hash algorithm to generate the subsequent session key ([0061-0066]).

the step of generating a new key and encrypting the new key with the current session key and exchanging the new key between the wireless local area network and the mobile terminal key ([0064-0066]).

the step of the wireless local area network and the mobile terminal generating a new session key employing the new session key and the secure seed, generating the new session key generation comprises the step of concatenating the said new key to the secure seed, the step of generating a new session key by applying a hash algorithm on said concatenated result, and the step of using the said new session key in communication between the wireless local area network and mobile terminal key ([0061-0066]).

the terminal device comprises a mobile terminal and the communications network comprises a wireless local area network (Fig.1-2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED ZIA whose telephone number is (571)272-3798. The examiner can normally be reached on 9:00 to 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SZ

February 28, 2009

/Syed Zia/

Primary Examiner, Art Unit 2431